



United States
Department of
Agriculture

Forest
Service

Shasta-Trinity
National Forests



Final Environmental Impact Statement

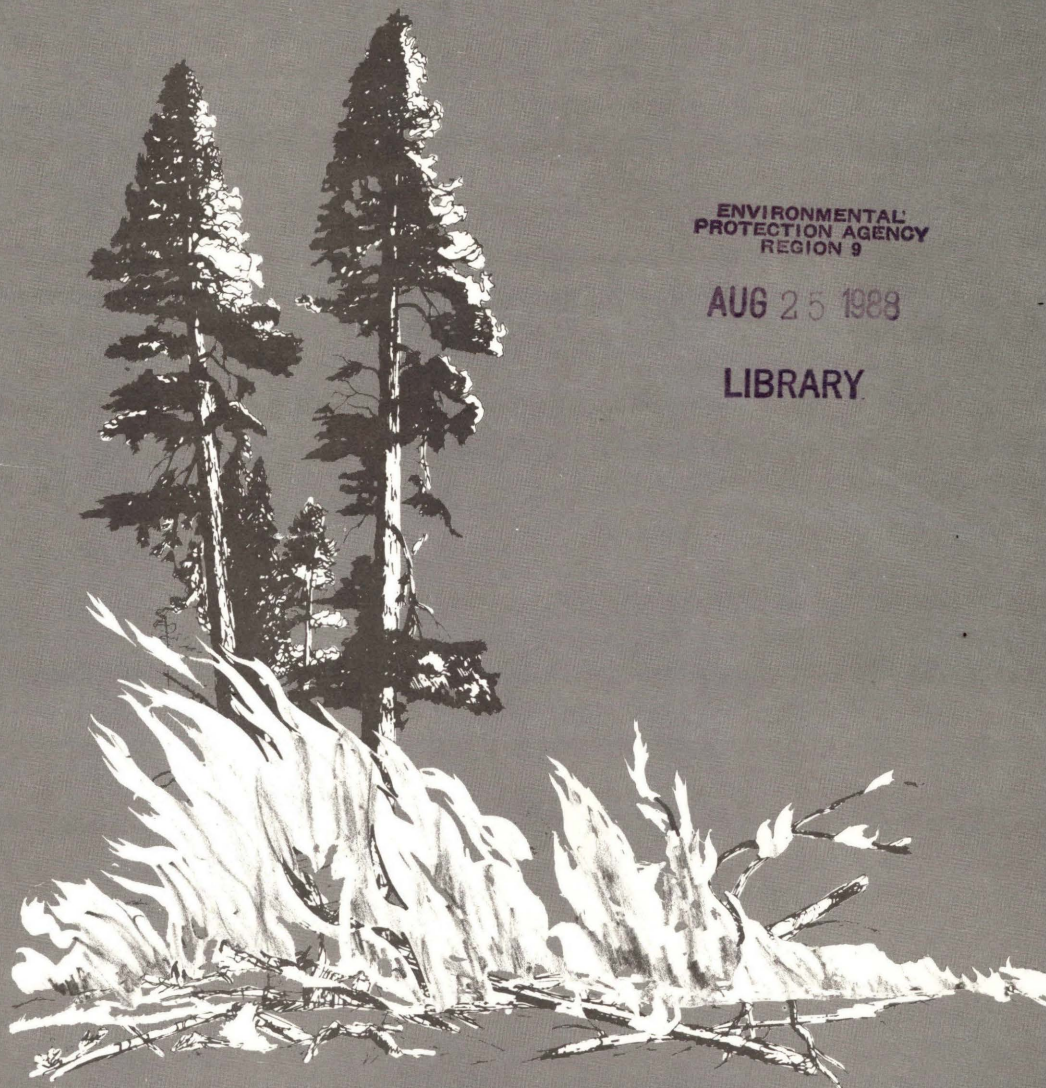
South Fork Fire Recovery
Salvage Project

Record of Decision

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RECORD OF DECISION

**UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service
Pacific-Southwest Region**

SOUTH FORK FIRE RECOVERY/SALVAGE PROJECT FINAL ENVIRONMENTAL IMPACT STATEMENT

**Shasta-Trinity National Forests
Hayfork Ranger District
Trinity County, California**

August 1988

I. INTRODUCTION

On August 30, 1987 a series of lightning-caused wildfires began. These fires burned into October, 1987 across major portions of the former South Fork Roadless Area on the Shasta-Trinity National Forests. The fires associated with this area were aggregated into two fire complexes, the Flume-Wallow Complex and the Cold Complex. Within the roadless area, approximately 17,200 acres burned at varying intensities. An estimated 37 million board feet of sawtimber on National Forest lands was killed or damaged beyond its ability to survive. The fires also had an effect on other resources, such as wildlife, watershed, soils, fisheries and aesthetics.

In order to assist the Forest Service in making a decision of whether to enter the roadless area with salvage and/or recovery activities and if so to what extent, an Environmental Impact Statement (EIS) was prepared. The EIS fully discloses the environmental consequences of implementing project options available to the Forest Service. The Draft Environmental Impact Statement (DEIS) was released June 3, 1988. After a public review period lasting until July 18, 1988, a Final Environmental Impact Statement (FEIS) was prepared. The FEIS describes and analyzes six alternatives in detail. It disclosed the environmental effects of all alternatives considered. The FEIS fully discloses information used to decide the type and extent of salvage and recovery activities for the area.

The direction which guided the analysis includes: The Multiple-Use Sustained Yield Act of 1960; the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA); the National Forest Management Act of 1976 (NFMA); the National Environmental Policy Act (NEPA); the

California Wilderness Act of 1984; the Wild and Scenic Rivers Act; Shasta-Trinity National Forests Timber Management Plan of 1975; and the Hayfork Ranger District Multiple-use Plan.

The National Forest Management Act of 1976 enables the Forest Service to continue the management of units of the National Forest System under existing land and resource management plans pending completion of Forest Plans. The Shasta-Trinity National Forest Land and Resource Management Plan is not in final form yet. The expected deterioration of the burned timber and its resultant loss in value, as well as the need to accomplish rehabilitation work for soils, watersheds, fish and wildlife as quickly as possible, make the South Fork Fire Salvage/Recovery Project decision an urgent one that cannot logically be delayed until the Forest Plan becomes final.

II. DECISION

Based on the South Fork Fire Salvage/Recovery FEIS, it is my decision to select Alternative 5 with modifications (5-M) as the alternative to implement for the South Fork Fire Salvage/Recovery Project. This Record of Decision documents my selection of the alternative and my rationale for the selection.

The selected alternative is a modification of the preferred alternative, Alternative 5, as described in the FEIS. The Interdisciplinary Team (IDT) and I have modified Alternative 5 to better reflect public response and management concerns after further field analysis and comment review.

Alternative 5 is modified as follows: 1) Unit 8 is corrected on the map to tractor ITM. 2) Units 38, 40 and 41 are added along with .3 miles of new road (1N36A) needed to access them. 3) Unit 72 is changed from 53 acres of helicopter clearcut to 13 acres of cable clearcut and 40 acres of helicopter ITM. 4) The south boundary of unit 77 is readjusted (portion deleted). 5) The west boundary of unit 64 is readjusted (portion deleted). 6) The road to unit 44 (.25 miles) is changed from new construction to existing road. 7) The road to the top of units 73 and 74 is added as existing.

Alternative 5-M will: 1) Rehabilitate the burned area utilizing an emphasis on maximizing the net value to the Federal Government through harvesting. This is done by salvaging units that yield a value greater than the costs of road construction and logging. 2) Implement fire recovery measures commensurate with the degree of access. 3) Reforest lands suitable for timber production and lands unsuitable for timber production which can be successfully planted. Approximately 844 acres will be planted with conifers. 4) Protect streams, watersheds and water quality to the greatest extent possible. 5) Harvest approximately 18.4 million board feet (MMBF) of burned timber. 6) Construct approximately 8.7 miles of new roads, and 7) Implement special mitigation measures to offset the effects of the fires.

Where additional tree mortality occurs in and adjacent to the selected harvest units, as a result of the fire, it is my intent to salvage this material. This material will only be harvested where site conditions, harvest prescriptions, and environmental standards and mitigations are within the parameters specified in the FEIS.

This decision includes a multi-resource monitoring plan that will provide information to evaluate project objectives and effects. Information gathered through monitoring will also be used to

evaluate the appropriateness and timing of future entries into the recovery area. This plan will also provide the basis for determining the necessary follow-up rehabilitation measures.

The selected alternative complies with all applicable State and Federal laws and regulations. If preliminary data from monitoring indicates that laws, regulations, or stated objectives are not being met, the project will be modified immediately.

III. RATIONALE

The Forest Service has an obligation to rehabilitate National Forest lands and resources damaged within the burned areas. With full consideration of environmental values, specific management objectives for resource recovery and rehabilitation are to:

- 1) To minimize further adverse on-site and off-site impacts to land and water resources as a result of the fires through application of recovery measures.
- 2) To reforest suitable, and to the extent practicable, plantable portions of lands classified as unsuitable where the timber stands were lost to wildfire.
- 3) To reforest burned areas as quickly as possible thus reducing soil erosion potential, minimizing establishment of competing vegetation and returning the area to a forested condition.
- 4) To salvage as much merchantable timber killed or damaged beyond recovery by the fires as is practicable, while protecting other resource values.
- 5) To salvage this timber as expeditiously as possible to minimize loss of timber value.

Other Alternatives Considered

Alternative 1 "No Action" - This alternative establishes a benchmark against which the other alternatives can be compared. It identifies and describes baseline conditions of the physical, biological, social and economic environment within the proposed project's area of influence.

Alternative 2 - This alternative is designed for resource recovery utilizing only the existing road system. No timber would be salvaged and no access roads would be constructed. Fire recovery measures including extensive reforestation and stream channel protection and restoration would be implemented.

Alternative 3 - This alternative emphasizes minimizing impacts of management activities in the released roadless area by salvaging only that timber that can be accessed from existing roads and roads constructed outside the released roadless area. No new roads would be constructed in the released South Fork Roadless Area. There would be 13.4 MMBF harvested. Fire recovery measures similar to those in Alternative 2, commensurate with access, would be implemented.

Alternative 4 - This alternative emphasizes minimizing impacts to the released roadless area by concentrating harvest in highest priority salvage areas. New roads would be constructed in the southern portion of the released roadless area. There would be 9.5 MMBF harvested. Fire recovery measures similar to those in Alternative 2, commensurate with access, would be implemented.

Alternative 5 - With this alternative, there is an emphasis on minimizing the costs of the project to the government by salvaging harvest units that yield a value greater than the costs of road construction and logging. Fire recovery measures similar to those in alternative 2, commensurate with access, would be implemented. There would be 18.2 MMBF harvested. Fire recovery measures similar to those in Alternative 2, commensurate with access, would be implemented.

Alternative 6 - Harvest of fire-killed and damaged timber and development of a transportation system is the emphasis of this alternative. Most of the available salvage volume would be accessed, either by ground based systems (tractor and skyline) or helicopter. An extensive road system would be constructed. There would be 22.8 MMBF harvested. Fire recovery measures similar to those in Alternative 2, commensurate with access, would be implemented.

Issues and Rationale

I am fully aware of the environmental consequences of the alternatives as described in the South Fork Fire Salvage/Recovery Project FEIS. Specific factors which weighed heavily in my selection of Alternative 5-M are discussed below. No single factor determined my choice of alternative. Alternative 5-M best addressed a combination of the issues that were established to guide the analysis.

Economics Issue - There is concern about 1) how salvage sales, or the lack thereof, will affect revenues to the U.S. Treasury and county governments, and 2) the impact on the timber industry and its related jobs during and after the salvage logging and reforestation is complete. There is concern that delays in selling salvageable timber will reduce revenues to both the Federal and county governments.

As a result of harvesting, Alternative 5-M generates the second highest estimate for direct and indirect employment. Only Alternative 6 is higher. Monetary return to dependent counties is also high, providing counties with revenue for roads and schools. Alternative 5-M provides for full potential future value of timber from suitable lands. This is a result of the extensive reforestation efforts restocking burned timberlands. The net value to the Federal government (return to the Federal Treasury) is the highest with Alternative 5-M.

Live (Green) Timber Issue - There is concern that the remaining live timber within burned areas may be harvested or destroyed during salvage logging operations. Some respondents felt this live timber should remain and be protected for a variety of reasons, such as wildlife habitat and natural re-seeding of the burned areas. Others felt that all high risk green trees likely to die should be removed now rather than impact the areas later with additional logging.

All alternatives protect live-green timber from harvest. Alternatives 1 and 2 harvest no dead timber therefore increase the risk of bark beetle attack to adjacent live timber. Alternatives 3 through 6, including 5-M, remove enough dead timber to reduce the risk of infestation ratings to light or insignificant. Alternative 5-M is more desirable than either Alternatives 1 or 2.

Watershed (Geology, Hydrology, Soils and Fisheries) Issue - There is a great deal of concern that cumulative watershed effects be thoroughly analyzed, along with effectiveness of mitigation measures (BMP's, etc.) to prevent unacceptable watershed degradation. The South Fork of the Trinity River and its tributaries contain important fisheries which are still recovering from the effects of the 1964 flood event. There is concern regarding the cumulative effect of the recent fires and the proposed salvage logging on these fishery values.

Alternative 5-M's overall risk to water quality degradation is insignificant. There is no foreseeable adverse affects to existing beneficial uses of water from the South Fork of the Trinity River or it's tributaries. Water quality degradation is negligible resulting from Alternative 5-M's placement of roads, mitigation measures, and the harvest systems which were selected requiring much of the area to be logged by cable or helicopter systems. Alternative 5-M offers a rapid recovery rate of vegetation including the second highest total acres directly reforested. The probability of cumulative watershed effects is unlikely. Increased surface soil erosion will be minimal. No direct impacts to fish habitat is expected. The probability of indirect impacts to fisheries occurring from the selected alternative activities are considered to be low to none. Potential sediment delivery which would adversely effect anadromous fish habitat within the South Fork Trinity River is considered to be minimal and not significant.

Roadless Character Issue - There is concern that salvage harvest alone, or salvage harvest with associated roads, would destroy the present roadless character of the area. Another concern is that the area be entered as soon as possible to capture the fire killed timber and develop a road transportation system that would facilitate future management of the areas resources.

Alternative 5-M will construct new roads into a portion of the released South Fork Roadless Area. The constructed roads will partially develop a transportation system to manage suitable timber lands in the project area. Approximately 7,300 acres will remain available for consideration as semi-primitive non-motorized (SPNM) land classification. Another 8,000 acres will be available for roaded natural classification within the project area. Considering the opportunity for SPNM lands on the Forests as a whole, I consider the effects of this action to be insignificant with respect to the opportunity for SPNM recreational experience.

Wildlife Issue - There is concern about the effect of salvage harvest on the habitat of old growth dependent species such as spotted owls, as well as other species that inhabit the area.

None of the alternatives will significantly impact the climax seral stages in the area, therefore Alternative 5-M is an acceptable choice in this aspect. No cumulative effects are anticipated to wildlife. Alternative 5-M also provides for increased wildlife habitat diversity levels. No threatened, endangered or sensitive wildlife species are affected by the selected alternative.

Wild and Scenic River Designation of the South Fork of the Trinity River Issue - There is concern about the effect of fire salvage harvest on the Wild and Scenic River qualities of the South Fork of the Trinity River.

Alternative 5-M will have no direct effects on recreationists from within the Wild and Scenic River area. Alternative 5-M would slightly alter the viewshed at middleground distances from the River. This is not a significant alteration and over time will revegetate, screening most of the management activities at these viewing distances. None of the action alternatives produced unacceptable visual impacts though each lowered the visual quality setting somewhat. I believe these impacts are short term and revegetation, including reforestation, will rapidly enhance the visual quality over time.

Water quality relationships related to the South Fork Trinity River were discussed in Watershed above.

Other considerations which I used in my selection process are the high percent of fuels reduction activities which would occur with Alternative 5-M and the overall reforestation opportunities offered by the selected alternative. Alternative 5-M treats the second highest acreage for fuels reduction. Alternative 6 is highest. Alternative 5-M has the second highest reforestation acreage with Alternative 6 also being the highest.

Site specific recovery and mitigation measures have been developed including special mitigation measures to lessen the impact of the fires and implementation of the project on the environment. These measures are detailed in the FEIS. The extent of the effects of the wildfires demanded that we reach beyond normal mitigation measures we would normally apply to such proposed activities. This resulted in special recovery and mitigation measures being devised to effectively reduce the direct impacts of the project as well as reducing the impacts of the wildfire itself. Examples of these types of measures include; contour falling of submerchantable trees on erodible slopes; increased widths of streamside management zones; lopping and scattering logging slash; and increased seeding of specified areas to revegetate rapidly. I believe that all practicable means to avoid or minimize environmental harm have been incorporated into the selected alternative.

An extensive monitoring plan has been developed which will be implemented for this project and area. This plan will provide valuable information regarding impacts of the project as well as information related to the effects of the wildfire within the South Fork Trinity River watershed. This plan is quite extensive and includes monitoring the following resource areas: Bark beetle populations; further tree mortality; threatened, endangered and sensitive species; fish habitat condition; potential sediment movement; water temperature; seeding and revegetation; percent ground cover; ripping of skid trails; streamside management zones; erosion control measures for road construction; recovery measures; visual resource change; recreation opportunities. The FEIS provides a detailed monitoring plan.

I am fully aware of the probable adverse environmental effects that cannot be avoided; the irreversible/irretrievable commitment of resources; and the relationship between short-term and long-term productivity. These factors are discussed in Chapter IV of the FEIS.

Implementation of Alternative 5-M will cause no unacceptable cumulative impact to any resource. A biological evaluation was done and there will be no adverse effects upon threatened, endangered or sensitive wildlife or plant species. There will be no significant effect to wetlands or floodplains. There will be no significant impact to cultural resources.

IV. IMPLEMENTATION

This project will be implemented no sooner than 30 days after the notice of availability is published in the Federal Register.

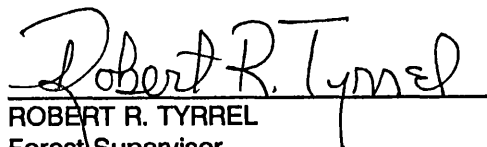
V. APPEAL RIGHTS

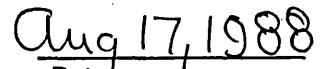
This decision is subject to appeal pursuant to 36 CFR 211.16 (published in Federal Register, Vol. 53, No. 93, May 13, 1988). A notice of appeal must be filed in writing within 30 days of publication (in newspaper) of the notice of decision. The notice of appeal must be filed with the reviewing officer:

Paul Barker, Regional Forester
USDA Forest Service
Pacific Southwest Region
630 Sansome Street
San Francisco, CA 94111

If a stay is requested, it must accompany the notice of appeal. An appellant must simultaneously provide a copy of the notice of appeal and any stay request to:

Forest Supervisor
Shasta-Trinity National Forests
2400 Washington Avenue
Redding, CA 96001


ROBERT R. TYRREL
Forest Supervisor
Shasta-Trinity National Forests


Date